

Application No. : 10/015,811
Amdt. Dated : March 1, 2004
Reply To Office Action Of : November 28, 2003

Amendments To The Claims

The listing of claims will replace all prior versions and listings of claims in the application. The listing of claims present each claim with its respective status shown in parentheses.

Claims 1 - 83 (Canceled).

Claim 84 (Currently Amended) A method of electrically connecting a capacitor having a high dielectric constant dielectric to a transistor active area, the method comprising:

forming a first barrier against ~~to~~-corrosion covering sidewalls of a contact hole, wherein the first barrier comprises insulating material;

forming a second barrier against ~~to~~-corrosion covering the first barrier and ~~other surfaces of the contact hole~~, wherein the second barrier comprises a conductive material; and

forming a conductive contact plug which electrically connects the capacitor including a high dielectric constant dielectric to the transistor active area of a lower circuit element, wherein the second barrier is around the conductive contact plug and the first barrier is around the second barrier, thereby forming an electrical contact including at least two protective barriers around the conductive contact plug to avoid corrosive aspects associated with the fabrication of the capacitor.

Claim 85 (Currently Amended) The method of Claim 84, further comprising forming a third barrier against ~~to~~-corrosion covering a side of the conductive contact plug opposite the transistor active area, wherein the third barrier comprises a conductive material and electrically connects the capacitor with the contact conductive contact plug.

Application No. : 10/015,811
Amdt. Dated : March 1, 2004
Reply To Office Action Of : November 28, 2003

Claim 86 (Currently Amended) The method of Claim 84, further comprising forming a third barrier against corrosion ~~to~~ covering a side of the conductive contact plug nearest the transistor active area, wherein the third barrier comprises a conductive material and electrically connects the transistor active area with the contact conductive contact plug.

Claim 87 (Currently Amended) The method of Claim 84, further comprising:

forming a third barrier against ~~to~~ corrosion covering a side of the conductive contact plug opposite the transistor active area, wherein the third barrier comprises a conductive material and electrically connects the capacitor with the contact conductive contact plug; and

forming a fourth barrier against ~~to~~ covering a side of the conductive contact plug nearest the transistor active area, wherein the fourth barrier comprises a conductive material and electrically connects the transistor active area with the contact conductive contact plug.

Claim 88 (Currently Amended) The method of Claim 84, further comprising forming an insulating layer including a sidewall portion and a cap portion covering ~~surrounding~~ at least one of a bit line or a word line on the lower circuit element.

Claim 89 (Previously Presented) The method of Claim 88, wherein portions of the at least one of a bit line or a word line contact the first barrier.